IN THE CLAIMS:

1. (currently amended) A method for providing on-hold music in a telephony environment such as a PBX comprising the steps of:

providing a plurality of music generation engines in a telephony system, wherein each of the music generation engines generates music of a plurality of styles of music, wherein the music generation engines collectively can generate a plurality of styles of music;

receiving telephone calls from a plurality of users, wherein the plurality of users are placed on-hold by the telephony system;

providing one or more audio prompts to each of the ~~one or more~~ plurality of users, wherein the one or more audio prompts inform each of the ~~one or more~~ plurality of users of the plurality of styles of music that can collectively be generated by the music generation engines and commands that may be entered by each of the ~~one or more~~ plurality of users via one or more telephony ~~tones~~ inputs to select a particular style of music as on-hold music;

detecting via the telephony system one or more first commands input by a particular user of the ~~one or more~~ plurality of users;

based on the detected one or more first commands, selectively controlling a first music generation engine of the plurality of music generation engines to automatically compose on-hold music that is audibly provided to the particular user ~~one or more users~~;

wherein, in response to the one or more first commands entered by the particular user ~~one or more users~~, on-hold music of a particular style is selected by ~~a~~ the particular user and the first music generation ~~engines are~~ engine is controlled ~~so that one of the music generation engines generates~~ to generate via autocomposition on-hold music of the particular style selected by the particular user, wherein the on-hold music of the particular style selected by the particular user is modified based on one or more second commands entered by the particular user, wherein the first music generation ~~engines are~~ engine is controlled ~~so that one of the music generation engines generates~~ to generate modified on-hold music of the particular style selected by the particular user based on the one or more second commands entered by the particular user.

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2. (previously presented) The method of claim 1, further providing the step of controlling one of the music generation engines to generate music of an initial style, wherein the initial style of music may be changed to a different style of music based on the one or more first commands or may be modified based on the one or more second commands.

3. (previously presented) The method of claim 2, wherein the initial style of music is predetermined by a configuration parameter of the telephony system.

4. (previously presented) The method of claim 2, wherein the initial style of music is determined at least in part based on caller ID information of a received telephone call.

5. (previously presented) The method of claim 2, wherein the initial style of music is determined at least in part based on the called party.

6. (previously presented) The method of claim 5, wherein the called party determines a particular style of music for the called party by a second configuration parameter of the telephony system.

7. (previously presented) The method of claim 2, wherein the initial style of music is determined at least in part based on time of day, week or year.

8. (currently amended) The method of claim 1, wherein, in response to the one or more second commands, the music of the particular style selected by the particular user is modified by changing one or more musical parameters associated with the music that is being generated.

9. (currently amended) The method of claim 8, wherein the one or more music parameters include volume, tempo beat, pitch or filtering parameters.

10. (currently amended) The method of claim 1, wherein, in response to the one or more second commands, the music of the particular style selected by the particular user is modified by changing one or more musical parameters associated with one or more instruments of the music that is being generated.

11. (currently amended) A method for providing on-hold music in a telephony environment such as a PBX comprising the steps of:

providing one or more music generation engines in a telephony system, wherein each of the one or more music generation engines generates music of a plurality of styles

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of music, wherein the one or more music generation engines collectively can generate a plurality of styles of music;

receiving one or more telephone calls from ~~on~~ one or more users, wherein the one or more users are placed on-hold by the telephony system;

providing one or more audio prompts to the one or more users, wherein the one or more audio prompts inform the one or more users of the plurality of styles of music that can collectively be generated by the one or more music generation engines and commands that may be entered by the one or more users via one or more telephony ~~tones~~ inputs to select a particular style of music as on-hold music;

detecting via the telephony system one or more first commands input by a particular user of the one or more users;

based on the detected one or more first commands, selectively controlling a first music generation engine of the one or more music generation engines to automatically compose on-hold music that is audibly provided to the ~~one or more users~~ particular user;

wherein, in response to the one or more first commands entered by the particular user ~~one or more users~~, on-hold music of a particular style is selected by ~~a~~ the particular user and the first music generation engine is ~~one or more music generation engines are~~ controlled ~~so that one of the music generation engines generates~~ to generate via autocomposition on-hold music of the particular style selected by the particular user, wherein the on-hold music of the particular style selected by the particular user is modified based on one or more second commands entered by the particular user, wherein the first music generation engine is ~~one or more music generation engines are~~ controlled ~~so that one of the music generation engines generates~~ to generate modified on-hold music of the particular style selected by the particular user based on the one or more second commands entered by the particular user.

12. (previously presented) The method of claim 11, further providing the step of controlling one of the music generation engines to generate music of an initial style, wherein the initial style of music may be changed to a different style of music based on the one or more first commands or may be modified based on the one or more second commands.

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13. (previously presented) The method of claim 12, wherein the initial style of music is predetermined by a configuration parameter of the telephony system.

14. (previously presented) The method of claim 12, wherein the initial style of music is determined at least in part based on caller ID information of a received telephone call.

15. (previously presented) The method of claim 12, wherein the initial style of music is determined at least in part based on the called party.

16. (previously presented) The method of claim 15, wherein the called party determines a particular style of music for the called party by a second configuration parameter of the telephony system.

17. (previously presented) The method of claim 12, wherein the initial style of music is determined at least in part based on time of day, week or year.

18. (currently amended) The method of claim 11, wherein, in response to the one or more second commands, the music of the particular style selected by the particular user is modified by changing one or more musical parameters associated with the music that is being generated.

19. (currently amended) The method of claim 18, wherein the one or more music parameters include volume, tempo beat, pitch or filtering parameters.

20. (currently amended) The method of claim 11, wherein, in response to the one or more second commands, the music of the particular style selected by the particular user is modified by changing one or more musical parameters associated with one or more instruments of the music that is being generated.

21. (previously presented) The method of claim 1, wherein the music generation engines generate on-hold music by executing program instructions, wherein one or more music composition algorithms are applied to song data in accordance with a song data structure to generate music output for a song.

22. (previously presented) The method of claim 21, wherein the song data structure includes at least one seed value, wherein the seed value is processed by a pseudorandom number generator routine.

23. (previously presented) The method of claim 22, wherein, based on the processing of the at least one seed value, musical data in accordance with the song data structure is provided for a complete song.

24. (previously presented) The method of claim 11, wherein the music generation engines generate on-hold music by executing program instructions, wherein one or more music composition algorithms are applied to song data in accordance with a song data structure to generate music output for a song.

25. (previously presented) The method of claim 24, wherein the song data structure includes at least one seed value, wherein the seed value is processed by a pseudorandom number generator routine.

26. (previously presented) The method of claim 25, wherein, based on the processing of the at least one seed value, musical data in accordance with the song data structure is provided for a complete song.

27. (previously presented) The method of claim 1, further comprising the steps of:

providing a radio tuner, wherein the radio tuner tunes in and provides as sound output audio information from one or a plurality of radio stations; and

defining one or a plurality of virtual radio stations, wherein each of the virtual radio stations corresponds to a particular one of the musical styles, wherein each of the plurality of virtual radio stations provides as sound output audio information comprising automatically generated music in accordance with the particular one of the musical styles that corresponds to the virtual radio station;

providing a radio/virtual radio user interface, wherein a user is presented with an option to select as sound output a radio station to which the radio tuner tunes or a virtual radio station;

in response to first user input selecting as sound output a radio station, providing audio output based on the audio information from one of the radio stations;

in response to second user input selecting as sound output a virtual radio station, providing audio output comprising automatically generated music in accordance with the particular one of the musical styles that corresponds to the virtual radio station.

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28. (previously presented) The method of claim 11, further comprising the steps of:

providing a radio tuner, wherein the radio tuner tunes in and provides as sound output audio information from one or a plurality of radio stations; and

defining one or a plurality of virtual radio stations, wherein each of the virtual radio stations corresponds to a particular one of the musical styles, wherein each of the plurality of virtual radio stations provides as sound output audio information comprising automatically generated music in accordance with the particular one of the musical styles that corresponds to the virtual radio station;

providing a radio/virtual radio user interface, wherein a user is presented with an option to select as sound output a radio station to which the radio tuner tunes or a virtual radio station;

in response to first user input selecting as sound output a radio station, providing audio output based on the audio information from one of the radio stations;

in response to second user input selecting as sound output a virtual radio station, providing audio output comprising automatically generated music in accordance with the particular one of the musical styles that corresponds to the virtual radio station.

29. (currently amended) A method for providing on-hold music in a telephony device that provides on-hold music in response to telephone calls received from callers, the method comprising the steps of:

providing at least one music generation engine in the telephony device, wherein the at least one music generation engine generates music of one of a plurality of styles of music;

receiving a telephone call from a first caller;

wherein, when the first caller is placed on-hold, controlling the at least one music generation engine to automatically compose on-hold music that is audibly provided to the first caller;

wherein, in response to one or more first commands entered by the first caller a user, on-hold music of a particular style is selected by the user first caller and the at least one music generation engine is controlled so that the at least one music generation engine

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generates via autocomposition on-hold music of the particular style selected by the <u>first caller</u> ~~user~~.

30. (currently amended) The method of claim 29, wherein the on-hold music of the particular style selected by the <u>first caller</u> ~~user~~ is modified based on one or more second commands entered by the <u>first caller</u> ~~user~~, wherein the at least one music generation engine is controlled so that the at least one music generation engine generates modified on-hold music of the particular style selected by the <u>first caller</u> ~~user~~ based on the one or more second commands entered by the <u>first caller</u> ~~user~~.

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